## PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 177 (MOUNTAIN RD) AND LAKE SHORE DR IN ANNE ARUNDEL COUNTY. THE MODIFICATION WILL REPLACE THE EXISTING PEDESTRIAN SIGNALS WITH APS/CPS. MD 177 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA THREE (3) PHASE FULLY-ACTUATED MODE, THE MD 177 MOVEMENTS OPERATE CONCURRENTLY AND LAKE SHORE DR OPERATES AS ITS OWN PHASE. THERE IS AN ALTERNATE ACTUATED PEDESTRIAN PHASE WITH AUDIBLE PEDESTRIAN SIGNALS ACROSS THE WEST LEG OF THE INTERSECTION.

III. SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS: TO CROSS MD 177 (MOUNTAIN RD)

410-841-1013

- 1. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS MOUNTAIN AT LAKE SHORE, WAIT."
- 2. WHEN THE WALK PHASE BEGINS, THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

## CONTACTS

OFFICE OF TRAFFIC AND SAFETY DISTRICT (DISTRICT 5) MS. CORREN JOHNSON MR. LEE STARKLOFF CHIEF, TRAFFIC OPERATIONS DISTRICT ENGINEER 410-787-7630 410-841-1001 MR. ROBERT SNYDER MS. KIMBERLY TRAN ASSISTANT DISTRICT ENGINEER - TRAFFIC ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630 410-841-1003 MR. EDWARD RODENHIZER MR. MIKE HUBER CHIEF, SIGNAL OPERATIONS SECTION DISTRICT UTILITY ENGINEER 410-787-7650 410-841-1039 MR. EUGENE BAILEY MR. JAMES FOLDEN ASSISTANT DISTRICT ENGINEER - CONSTRUCTION CHIEF, SIGN OPERATIONS SECTION 410-787-7670 410-841-1031 MR. MICHAEL STOCKER MR. JOSEPH GECKLE ASSISTANT DISTRICT ENGINEER - MAINTENANCE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)

410-787-7696

## EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADIMISTRATION

ITEM NO. QUANTITY UNIT

DESCRIPTION SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 2 EA R10-3(1) "PUSH BUTTON TO CROSS 'FORT SMALLWOOD'" (9"X15")

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EΑ	MAINTENANCE OF TRAFFIC
2002	1 .	CY	TEST PIT EXCAVATION
5003	200	ĹF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	90	LF	12 IN WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	160	LF	STANDARD TYPE 'A' COMBINATION CURB AND GUTTER 12 IN. GUTTER PAN 8 IN. DEPT
6002	390	SF	5 IN. CONCRETE SIDEWALK
6003	20	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	3	EΑ	12 IN. LED SIGNAL HEAD SECTION
8005	1	EA	ADJUST HANDHOLE TO GRADE WITH NEW FRAME & COVER
8008	2	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	2	EΑ	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8018	2	ΕA	LED 16 IN COUNTDOWN PEDESTRIAN SIGNAL HEAD
8037	55	ĹF	DISCONNECT, PULL-BACK & REROUTE CABLES
8043	30	ĹF	UP TO 4 IN. SCHEDULE 80 RIDGID PVC CONDUIT - TRENCHED
8045	2	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	40	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8058	325	ĹF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	350	ĹF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8061	300	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATIONS.

PHASE CHART

7 8 9 10 11 12 13 14 21 22

PHASE 2 & 6	G	G	G	G	G	R	R	DARK	DW	DW							
2 & 6 CHANGE	· Y	Υ	Υ	Υ	Y	R	R	DARK	DW	DW							
PHASE 4	R	R	R	R	R	G	G	DARK	DW	DW	<del></del>						
4 CHANGE	R	R	R	R	R	Υ	Υ	DARK	DW	DW	-						
PHASE 4 ALT.	R	· R	R	R	R	G	G	DARK	WK	WK	9 ^ .						
PED CLEARANCE	R	R	R	R	R	Υ	Υ	DARK	FL/DW	FL/DW	· /\ —						
4 ALT. CHANGE	R	R	R	R	R	R	R	DARK	DW	DW	7 0						
FIREHOUSE PRE-EMP.	R	R	R	R	R	R	R	R	R	R	. Y	Υ.	R	R	DW	DW	4 ⊢
PRE-EMP. CHANGE	R	R	R	R	R	R	R	R	R	R	Y	Υ	R	R	DW	DW	$\vdash$
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK								

C.E.GW

WIRING DIAGRAM

IZC TO TO SITE #7

TOD NO: XY139-10 SHA NO: AA189B58 MD 173 @ Appian Way/MD 173 @ Duvall Hwy/Valley Rd/MD 177 @ Lake Shore

WIRING KEY

7 CONDUCTOR ELECTRICAL CABLE ( NO. 14 AWG)

B,C - 5 CONDUCTOR ELECTRICAL CABLE ( NO. 14 AWG)

D,E - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

REROUTED EXISTING SIGNAL CABLE

I/C - EXISTING INTERCONNECT

PS - EXISTING OVERHEAD POWER CABLE

GW - 1 CONDUCTOR STRANDED COPPER GROUND WIRE (NO. 6 AWG)

EXISTING GROUND ROD

I/C - 170 TO TO SEE 7/5 L-O'BCE MOW418206

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 177(MOUNTAIN RD) at LAKE SHORE DR

LAKESHORE, MD **GENERAL INFORMATION SHEET** 

SHEET NO. 06 OF 06

SCALE N.T.S. DATE MAY 1, 2013 CONTRACT NO. XY1395185 COUNTY ANNE ARUNDEL

DRAWING **SG-02** OF 02

**PARSONS** BRINCKERHOFF

100 S. Charles Street Tower 1, 10th Floor Baltimore, MD 21201 (Ph) 410-787-5050 (Fax) 410-727-4608 http://www.pbworld.com

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